

EMERGENCY MEDICAL SERVICES (EMS) 3

ACTIVITY/COURSE CODE: 5532

Course Description:

Emergency Medical Services (EMS) 3 comprises information first responders need to provide appropriate initial care, regardless of the type of emergency. The course stresses the steps to follow in an emergency until more advanced medical personnel arrive including scene safety for the rescuer, oxygen administration, and infection control. Successful completion of this course may result in first response certification available through National Institutes of Health (NIH) and American Red Cross.

General Requirements:

This course is recommended for students in grades 11–12.

Prerequisite(s):

Emergency Medical Services (EMS) 2 course or teacher recommendation

Units: 1 to 2 units

Resources:

American Red Cross www.redcross.org for your local chapter:

ARC Emergency Response Textbook*

ISBN: 1-58480-095-X or email arc@staywell.com with stock #656523

ARC Emergency Response Workbook*

ISBN: 1-58480-096-8 or email arc@staywell.com with stock #656524

ARC Emergency Response Instructor Manual*

ISBN: 1-58480-097-6 or email arc@staywell.com with stock #656525

ARC Emergency Response Video I and II*

ISBN: 1-58480-098-4 or email arc@staywell.com with stock #656526

*currently being updated (April 2006)

Bergeron, J. David. First Responder, Latest Edition. Pearson Education.

<http://vig.prenhall.com/catalog>

Goold, Grant B. and Scott Vahradian. Basic First Response, Latest Edition. Brady Books. www.bradybooks.com

Mistovich, Joseph. Review Manual for the First Responder, Latest Edition.
Pearson Education. <http://vig.prenhall.com/catalog>.

National Health Care Skills Standards, National Consortium on Health Science and Technology Education, 2410 Woodlake Drive, Suite 440, Okemos, Michigan 48864, phone 517-347-3332, fax 517-347-4096, www.nchste.org.

National Safety Council, <http://www.nsc.org/train/ec/>. First Responder, Latest Edition.

Stoy, Walt. Mosby's First Responder Textbook. Latest Edition.
www.us.elsevierhealth.com.

EMERGENCY MEDICAL SERVICES 3 STANDARDS

FOUNDATION STANDARD 1: ACADEMIC FOUNDATION

HEALTHCARE WORKERS WILL KNOW THE ACADEMIC SUBJECT MATTER REQUIRED FOR PROFICIENCY WITHIN THEIR AREA. THEY WILL USE THIS KNOWLEDGE AS NEEDED IN THEIR ROLE.

Basic Anatomy and Physiology

1. Describe the anatomy and function of the respiratory system.
2. Describe the anatomy and function of the circulatory system.
3. Describe the anatomy and function of the musculoskeletal system.
4. Describe the components and function of the nervous system.

FOUNDATION STANDARD 2: COMMUNICATIONS

HEALTHCARE WORKERS WILL DO THE VARIOUS METHODS OF GIVING AND OBTAINING INFORMATION. THEY WILL COMMUNICATE EFFECTIVELY, BOTH ORALLY AND IN WRITING.

FOUNDATION STANDARD 3: SYSTEMS

HEALTHCARE WORKERS WILL UNDERSTAND HOW THEIR ROLE FITS INTO THEIR DEPARTMENT, THEIR ORGANIZATION, AND OVERALL HEALTHCARE ENVIRONMENT. THEY WILL IDENTIFY HOW KEY SYSTEMS AFFECT SERVICES THEY PERFORM AND QUALITY OF CARE.

Introduction to EMS Systems

1. Define the components of Emergency Medical Services (EMS) systems.

FOUNDATION STANDARD 4: EMPLOYABILITY SKILLS

HEALTHCARE WORKERS WILL UNDERSTAND HOW EMPLOYABILITY SKILLS ENHANCE THEIR EMPLOYMENT OPPORTUNITIES AND JOB SATISFACTION. THEY WILL DEMONSTRATE SKILLS THAT SUPPORT AND MAINTAIN JOB FUNCTIONS AND WILL UPGRADE THESE SKILLS AS NEEDED.

1. Differentiate the roles and responsibilities of the first responder from other out-of-hospital care providers.
2. Define medical oversight and discuss the first responder's role in the process.
3. Discuss the types of medical oversight that may affect the medical care of a first responder.
4. State the specific statutes and regulations in South Carolina regarding the EMS system.
5. Accept and uphold the responsibilities of a professional appearance when on duty or when responding to calls.
6. Explain the rationale for maintaining a professional appearance when on duty or when responding to calls.

7. Describe why it is inappropriate to judge a patient based on a cultural, gender, age, or socioeconomic model, and to vary the standard of care rendered as a result of that judgment.

FOUNDATION STANDARD 5: LEGAL RESPONSIBILITIES

HEALTHCARE WORKERS WILL UNDERSTAND THE LEGAL RESPONSIBILITIES, LIMITATIONS, AND THE IMPLICATIONS OF THEIR ACTIONS WITHIN THE HEALTHCARE DELIVERY SYSTEM. THEY WILL PERFORM THEIR DUTIES ACCORDING TO REGULATIONS, POLICIES, LAWS, AND LEGISLATED RIGHTS OF PATIENTS AND OTHER CLIENTS.

FOUNDATION STANDARD 6: ETHICS

HEALTHCARE WORKERS WILL UNDERSTAND ACCEPTED ETHICAL PRACTICES WITH RESPECT TO CULTURAL, SOCIAL, AND ETHNIC DIFFERENCES WITHIN THE HEALTHCARE ENVIRONMENT. THEY WILL PERFORM THEIR DUTIES ACCORDING TO ESTABLISHED ETHICAL GUIDELINES SUPPORTING SENSITIVE AND QUALITY HEALTHCARE DELIVERY.

Medical, Legal, and Ethical

1. Define the first responder scope of care.
2. Discuss the importance of Do Not Resuscitate (DNR) (advance directives) and local or state provisions regarding EMS application.
3. Define consent and discuss the methods of obtaining consent.
4. Differentiate between expressed and implied consent.
5. Explain the role of consent of minors in providing care.
6. Discuss the implications for the first responder in patient refusal of transport.
7. Discuss the issues of abandonment, negligence, battery, and the implications of each for the first responder.
8. State the conditions necessary for the first responder to have a duty to act.
9. Explain the importance, necessity, and legality of patient confidentiality.
10. List the actions that a first responder should take to assist in the preservation of a crime scene.
11. State the conditions that require a first responder to notify local law enforcement officials.
12. Discuss issue concerning the fundamental components of documentation.
13. Explain the rationale for the needs, benefits, and usage of advanced directives.
14. Explain the rationale for the concept of varying degrees of DNR.

FOUNDATION STANDARD 7: SAFETY PRACTICES

HEALTHCARE WORKERS WILL UNDERSTAND THE EXISTING AND POTENTIAL HAZARDS TO PATIENTS AND OTHER CLIENTS, COWORKERS, AND TO THEMSELVES. THEY WILL PREVENT INJURY OR ILLNESS THROUGH SAFE WORK PRACTICES AND FOLLOW HEALTH AND SAFETY POLICIES AND PROCEDURES.

Scene Safety

1. Explain the need to determine scene safety.
2. Discuss the importance of body substance isolation.
3. Describe the steps the first responder should take for personal protection.
4. List the personal protective equipment necessary for each of the following situations: hazardous materials, rescue operations, violent scenes, crime scenes, electricity, water and ice, exposure to bloodborne pathogens, and exposure to airborne pathogens.
5. Explain the importance of serving as an advocate for the use of appropriate protective equipment.
6. Use appropriate personal protective equipment given a scenario featuring potential infectious exposure. Remove and discard the protective garments at the completion of the scenario.
7. Complete disinfection/cleaning and all reporting documentation given a scenario featuring potential infectious exposure.

FOUNDATION STANDARD 8: TEAMWORK

HEALTHCARE WORKERS WILL UNDERSTAND THE ROLES AND RESPONSIBILITIES OF INDIVIDUAL MEMBERS AS A PART OF THE HEALTHCARE TEAM, INCLUDING THEIR ABILITY TO PROMOTE THE DELIVERY OF QUALITY HEALTHCARE. THEY WILL INTERACT EFFECTIVELY AND SENSITIVELY WITH ALL MEMBERS OF THE HEALTHCARE TEAM.

EMS Operations

1. Discuss the medical and non-medical equipment needed to respond to a call.
2. List the phases of an out-of-hospital call.
3. Discuss the role of the first responder in extrication.
4. List various methods of gaining access to the patient.
5. Distinguish between simple and complex access.
6. Describe what the first responder should do if there is reason to believe that there is a hazard at the scene.
7. State the role the first responder should perform until appropriately trained personnel arrive at the scene of a hazardous materials situation.
8. Describe the criteria for a multiple-casualty situation.
9. Discuss the role of the first responder in the multiple-casualty situation.
10. Summarize the components of basic triage.
11. Explain the rationale for having the unit prepared to respond.
12. Given a scenario of a mass casualty incident, perform triage.
13. Participate in service learning/job shadowing/work-based learning experiences.

FOUNDATION STANDARD 9: HEALTH MAINTENANCE PRACTICES

HEALTHCARE WORKERS WILL UNDERSTAND THE FUNDAMENTALS OF WELLNESS AND THE PREVENTION OF DISEASE PROCESSES. THEY WILL PRACTICE PREVENTATIVE HEALTH BEHAVIORS WITH AND AMONG THEIR PATIENTS AND OTHER CLIENTS.

Emotional Aspects

1. List possible emotional reactions that the first responder may experience when faced with trauma, illness, death, and dying.
2. Discuss the possible reactions that a family member may exhibit when confronted with death and dying.
3. State the steps in the first responder's approach to the family confronted with death and dying.
4. State the possible reactions of the family of the first responder.
5. Recognize the signs and symptoms that critical incident stress may exhibit.
6. State possible steps that the first responder may take to help reduce/alleviate stress.

Lifting and Moving

1. Define body mechanics.
2. Discuss the guidelines and safety precautions that need to be followed when lifting a patient.
3. Describe the indications for an emergency move.
4. Describe the indications for assisting in nonemergency moves.
5. Discuss the various devices associated with moving a patient in the out-of-hospital arena.
6. Explain the rationale for properly lifting and moving patients.
7. Explain the rationale for an emergency move.
8. Demonstrate an emergency move.
9. Demonstrate a nonemergency move.
10. Demonstrate the use of equipment utilized to move patients in the out-of-hospital arena.

FOUNDATION STANDARD 10: TECHNICAL SKILLS

HEALTHCARE WORKERS WILL APPLY TECHNICAL SKILLS REQUIRED FOR ALL CAREER SPECIALTIES. THEY WILL DEMONSTRATE SKILLS AND KNOWLEDGE AS APPROPRIATE.

Airway Care and Rescue Breathing

1. List the signs of inadequate breathing.
2. Describe how to clear a foreign body airway obstruction in a responsive adult, child, and infant.
3. Describe how to clear a foreign body airway obstruction in an unresponsive adult, child, and infant.

4. Explain why basic life support ventilation and airway protective skills take priority over most other basic life support skills.
5. Place the interests of the patient with airway problems as the foremost consideration when making any and all patient care decisions.
6. Demonstrate the steps in the head-tilt chin-lift.
7. Demonstrate the steps in the jaw thrust.
8. Demonstrate the techniques of suctioning.
9. Demonstrate the steps in mouth-to-mouth ventilation with body substance isolation (barrier shields).
10. Demonstrate how to use a resuscitation mask to ventilate a patient.
11. Demonstrate how to ventilate a patient with a stoma.
12. Demonstrate how to measure and insert an oropharyngeal (oral) airway.
13. Demonstrate how to measure and insert a nasopharyngeal (nasal) airway.
14. Demonstrate how to ventilate infant and child patients.
15. Demonstrate how to clear a foreign body airway obstruction in a responsive adult, child, and infant.
16. Demonstrate how to clear a foreign body airway obstruction in an unresponsive adult, child, and infant.

Patient Assessment

1. Describe common hazards for a medical patient at the scene of a trauma.
2. Determine whether or not the trauma scene is safe to enter.
3. Discuss common mechanisms of injury/nature of illness.
4. Discuss the reason for identifying the total number of patients at the scene.
5. Explain the reason for identifying the need for additional help or assistance.
6. Summarize the reasons for forming a general impression of the patient.
7. Discuss methods of assessing mental status.
8. Differentiate between assessing mental status in the adult, child, and infant patient.
9. Describe methods used for assessing whether or not a patient is breathing.
10. Differentiate between a patient with adequate breathing and a patient with inadequate breathing.
11. Differentiate between obtaining a pulse in an adult, child, and infant patient.
12. Discuss the need for assessing the patient for external bleeding.
13. Explain the reason for prioritizing a patient for care and transport.
14. Discuss the components of the physical exam.
15. State the areas of the body that are evaluated during the physical exam.
16. Explain what additional questioning may be asked during the physical exam.

17. Discuss the components of the ongoing assessment.
18. Describe the information included in the first responder hand-off report.
19. Explain the rationale for crew members to evaluate scene safety prior to entering.
20. Serve as a model for others by explaining how patient situations affect your evaluation of the mechanism of injury or illness.
21. Explain the importance of forming a general impression of the patient.
22. Demonstrate the techniques for assessing mental status.
23. Demonstrate the techniques for assessing the airway.
24. Demonstrate the techniques for assessing whether or not the patient is breathing.
25. Demonstrate the techniques for assessing whether or not the patient has a pulse.
26. Demonstrate the techniques for assessing the patient for external bleeding.
27. Demonstrate the techniques for assessing the patient's skin color, temperature, condition, and capillary refill (infants and children only).
28. Demonstrate questioning a patient to obtain a SAMPLE history.
29. Demonstrate the skills involved in performing the physical exam.
30. Demonstrate the ongoing assessment.

Circulation

1. List the reasons for the heart to stop beating.
2. Define the components of cardiopulmonary resuscitation.
3. Describe each link in the chain of survival and how it relates to the EMS system.
4. Explain when the first responder is able to stop CPR.
5. Demonstrate the proper technique of chest compressions on an adult.
6. Demonstrate the proper technique of chest compressions on a child.
7. Demonstrate the steps of adult one rescuer CPR.
8. Demonstrate the steps of adult two rescuer CPR.
9. Demonstrate child CPR.
10. Identify the patient who presents with a general medical complaint.
11. Explain the steps in providing emergency medical care to a patient with a general medical complaint.
12. Identify the patient who presents with a specific medical complaint of altered mental status.
13. Explain the steps in providing emergency medical care to a patient with an altered mental status.
14. Demonstrate the steps in providing emergency medical care to a patient with a general medical complaint.
15. Demonstrate the steps in providing emergency medical care to a patient with an altered mental status.
16. Demonstrate the steps in providing emergency medical care to a patient with seizures.

17. Demonstrate the steps in providing emergency medical care to a patient with an exposure to cold.
18. Demonstrate the steps in providing emergency medical care to a patient with an exposure to heat.
19. Demonstrate the steps in providing emergency medical care to a patient with a psychological crisis.

Shock, Bleeding, and Soft Tissue

1. Differentiate between arterial, venous, and capillary bleeding.
2. State the emergency medical care for external bleeding.
3. Establish the relationship between body substance isolation (BSI) and bleeding.
4. List the signs of internal bleeding.
5. List the steps in the emergency medical care of the patient with signs and symptoms of internal bleeding.
6. Establish the relationship between body substance isolation (BSI) and soft tissue injuries.
7. State the types of open soft tissue injuries.
8. Describe the emergency medical care of the patient with a soft tissue injury.
9. Discuss the emergency medical care considerations for a patient with a penetrating chest injury.
10. Discuss the emergency medical care considerations for a patient with an open wound to the abdomen.
11. Describe the emergency medical care for a patient with an impaled object.
12. State the emergency medical care for an amputation.
13. Describe the emergency medical care for burns.
14. List the functions of dressing and bandaging.
15. Explain the rationale for body substance isolation when dealing with bleeding and soft tissue injuries.
16. Demonstrate direct pressure as a method of emergency medical care for external bleeding.
17. Demonstrate the use of diffuse pressure as a method of emergency medical care for external bleeding.
18. Demonstrate the use of pressure points as a method of emergency medical care for external bleeding.
19. Demonstrate the care of the patient exhibiting signs and symptoms of internal bleeding.
20. Demonstrate the steps in the emergency medical care of a patient with open soft tissue injuries.
21. Demonstrate the steps in the emergency medical care of a patient with an open chest wound.
22. Demonstrate the steps in the emergency medical care of a patient with open abdominal wounds.

23. Demonstrate the steps in the emergency medical care of a patient with an impaled object.
24. Demonstrate the steps in the emergency medical care of a patient with amputation.
25. Demonstrate the steps in the emergency medical care of an amputated part.

Injuries to Muscles and Bones

1. Describe the function of the musculoskeletal system.
2. Differentiate between an open and a closed painful, swollen, deformed extremity.
3. List the emergency medical care for a patient with a painful, swollen, deformed extremity.
4. Relate the mechanism of injury to potential injuries of the head and spine.
5. State the signs and symptoms of a potential spine injury.
6. Describe the methods of determining whether or not a responsive patient may have a spine injury.
7. List the signs and symptoms of injury to the head.
8. Describe the emergency medical care for injuries to the head.
9. Explain the rationale for the patient's feeling a need for immobilization of the painful, swollen, deformed extremity.
10. Demonstrate a caring attitude toward a patient with a musculoskeletal injury who requested emergency medical services.
11. Place the interests of the patient with a musculoskeletal injury as the foremost consideration when making any and all patient care decisions.
12. Communicate with empathy to a patient with a musculoskeletal injury, as well as with family members and friends of the patient.
13. Demonstrate the steps in the emergency medical care of a patient with a painful, swollen, deformed extremity.
14. Demonstrate opening the airway in a patient with a suspected spinal cord injury.
15. Demonstrate evaluating a responsive patient with a suspected spinal cord injury.
16. Demonstrate stabilizing of the cervical spine.

Childbirth

1. Identify the following structures: birth canal, placenta, umbilical cord, and amniotic sac.
2. Define the following terms: crowning, bloody show, labor, and abortion.
3. State indications of an imminent delivery.
4. State the steps in the pre-delivery preparation of the mother.
5. Establish the relationship between body substance isolation and childbirth.

6. State the steps to assist in the delivery.
7. Describe care of the baby as the head appears.
8. Discuss the steps in delivery of the placenta.
9. List the steps in the emergency medical care of the mother post-delivery.
10. Discuss the steps in caring for a newborn.
11. Explain the rationale for attending to the feelings of a patient in need of emergency care during childbirth.
12. Demonstrate a caring attitude toward a patient who, during childbirth, requests emergency medical services.
13. Place the interests of the patient during childbirth as the foremost consideration when making any and all patient care decisions.
14. Communicate with empathy to a patient during childbirth, as well as with family members and friends of the patient.
15. Demonstrate the steps to assist in the normal cephalic delivery.
16. Demonstrate necessary care procedures of the fetus as the head appears.
17. Attend to the steps in the delivery of the placenta.
18. Demonstrate the post-delivery care of the mother.
19. Demonstrate the care of the newborn.

Pediatric Emergencies

1. Describe differences in anatomy and physiology of the infant, child, and adult patient.
2. Describe assessment of the infant or child.
3. Indicate various causes of respiratory emergencies in infants and children.
4. Summarize emergency medical care strategies for respiratory distress and respiratory failure/arrests in infants and children.
5. List common causes of seizures in the infant and child patient.
6. Describe emergency medical care of the infant and child trauma patient.
7. Summarize the signs and symptoms of possible child abuse and neglect.
8. Describe the medical-legal responsibilities in suspected child abuse.
9. Recognize need for first responder debriefing following a difficult infant or child transport.
10. Demonstrate assessment of the infant and child.

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Revised by:

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